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THE CLASSIFICATION OF AMERICAN LANGUAGES

By FRANZ BOAS

EVER since Major Powell completed his classification of American languages, which was published in the seventh volume of the Annual Reports of the Bureau of (American) Ethnology, and a revised edition of which is contained in the first volume of the Handbook of North American Indians, students of American languages have paid more attention to a better understanding and a more thorough knowledge of the single languages than to classification. Much of the material on which Major Powell's work is based is exceedingly scanty, and it is obvious that more accurate studies will show relationships between linguistic stocks which at the time could not be safely inferred. The classification is largely based on vocabularies. Many of these were contained in old literature and are very inadequate. Others were hastily collected in accordance with the exigencies of the situation, and neither Major Powell nor any of his collaborators, like Albert S. Gatschet and James Owen Dorsey, would have claimed that their classification and the map of distribution of languages could be considered as final.

Of late years, largely through the influence of Dr. Edward Sapir, the attempts have been revived to compare, on the basis of vocabularies, languages which apparently are very distinct, and Drs. Sapir, Kroeber, Dixon, and particularly Radin, have attempted to prove far-reaching relationships.

Since for many years I have taken the position that comparison between American languages should proceed from the study of fairly closely related dialects towards the study of more diverse forms, it seems desirable to state briefly the theoretical points of view upon which my own attitude has been and is still based. As early as 1893 I pointed out that the study of the grammar of American languages has demonstrated the occurrence of a number of

striking morphological similarities between neighboring stocks which, however, are not accompanied by appreciable similarities in vocabulary. At that time I was inclined to consider these similarities as a proof of relationship of the same order as that of languages belonging, for instance, to the Indo-European family. While further studies, particularly in California, have shown that we may generalize the observations which I made based on the languages of the North Pacific coast, I doubt whether the interpretation given at that time is tenable.

When we consider the history of human languages as it is revealed by their present distribution and by what little we know about their history during the last few thousand years, it appears fairly clearly that the present wide distribution of a few linguistic stocks is a late phenomenon, and that in earlier times the area occupied by each linguistic family was small. It seems reasonable to suppose that the number of languages that have disappeared is very large. Taking our American conditions as an example, we may observe at the present time that many languages are spoken by small communities, and while there is no proof of the recent development of any new very divergent language, there are numerous proofs showing the extinction of some languages and the gradual extension of others. As the area occupied by the Indo-European family has gradually extended and as foreign languages have become extinct owing to its expansion, so we find that Chinese has gradually expanded its area. In Siberia, Turkish and other native languages have superseded the ancient local languages. In Africa the large expansion of Bantu is rather recent. Arabic is superseding the native speech in North Africa. In America the expansion of Algonquin speech has been continuing during the historic period, and several of the isolated languages of the Southeast have been superseded by Creek and related languages. I have discussed this question in another place and have explained my view that probably at a very early time the diversity of languages among people of the same physical type was much greater than it is now. I do not mean to imply by this that all the languages must have developed entirely independently, but rather

that, if there was an ancient common source of several modern languages, they have become so much differentiated, that without historical knowledge of their growth, the attempts to prove their interrelation cannot succeed.

It should be borne in mind that the problem of the study of languages is not one of classification but that our task is to trace the history of the development of human speech. Therefore, classification is only a means to an end. Our aim is to unravel the history of the growth of human language, and, if possible, to discover its underlying psychological and physiological causes. From this point of view the linguistic phenomena cannot be treated as a unit, but the manifestations of linguistic activity must be studied first each by itself, then in their relations to other linguistic phenomena:

The three fundamental aspects of human speech are phonetics, grammar, and vocabulary. When we turn to their consideration separately, we find, at least in America, a curious condition. The study of phonetics indicates that certain features have a limited and well-defined distribution which, on the whole, is continuous. To give an example: the extraordinary development of the series of *k* sounds and of laterals (*l* sounds) is common to the most diverse languages of the North Pacific coast, while in California and east of the Rocky mountains this characteristic feature disappears. In a similar way nasalization of vowels is absent in the northwest part of America, but it is very strongly developed on the central and eastern plains. The labialization of *k* sounds following an *o* or *u* is widely spread in the extreme Northwest, and infrequent outside of that territory. The study of the phonetics of America is not sufficiently developed to describe in detail areas of distribution of characteristic sounds or sound groups, but it may safely be stated from what we know, that similar phonetic traits often belong to languages which are morphologically entirely distinct; and that on the other hand, very great phonetic differences develop in the same linguistic stock.

The study of the morphology of American languages illustrates also definite areas of characterization. It is, for instance, most

striking that reduplication as a morphological process occurs extensively on the Great Plains and in the Eastern Woodlands, as well as in that part of the Pacific coast south of the boundary between British Columbia and Alaska. Among the great families of the north it is entirely unknown. Incorporation, which in earlier times was considered as one of the most characteristic traits of American languages, is also confined to certain definite groups. It is characteristically developed in the Shoshoni group, Pawnee, Kutenai, and Iroquois, while north of this region it is either absent in its characteristic form, or only weakly developed. The use of instrumentals, which indicate the manner of action as performed with parts of the body, or by other instruments, shows also on the whole a continuous distribution. It is a fundamental trait of Kutenai, Shoshoni, and Sioux, and in all of them it is expressed in a similar manner. The use of true cases and of locative and similar noun forms occurs among the Shoshoni and some of their neighbors, while in other regions it is rather rare. Of even greater importance is the differentiation between nominal and verbal concepts, and between neutral and active verbs, the distribution of which is somewhat irregular.

Although our knowledge of these phenomena is not by any means adequate, it appears fairly clearly that, when the various features are studied in detail, the areas of their distribution do not coincide.

The study of the vocabulary presents similar conditions. It would seem that the number of loan words in American languages is not as great as in European languages. At least, it is difficult to recognize loan words in large numbers. It is, however, striking that the word categories which appear in neighboring languages are sometimes quite similar. This appears, for instance, in the case of terms of relationship. The remarkable extent to which the use of reciprocal terms of relationship is found on the western plateaus, is a characteristic example. It is intelligible that nomenclature and cultural states are closely related, and, therefore, it seems plausible that similarities in underlying categories of vocabularies will occur where cultural conditions are the same or nearly the same.

This remark has no direct bearing upon the stems that underlie word formation. To a certain extent they are dependent upon morphological characteristics, at least in so far that non-existent grammatical categories must be supplied in other ways. When, for instance, some languages, like the Eskimo, lack those adverbial elements which correspond to our prepositions (in, out of, up, down, etc.), these must be supplied by special verbs which do not need to exist in languages that abound in locative verbal elements. On the whole, a certain correlation may be observed between the lexicographical and morphological aspects of a language. The more frequently "material" concepts (in Steinthal's sense) are expressed by morphological devices, the more generalized are, on the whole, the word stems, and words are generally formed by limitation of these stems. When we find similar structure, we find, therefore, also a tendency towards the development of similar categories of stems. There are, however, others that are not so determined. It is, for instance, characteristic of many American languages that verbal ideas are expressed by different stems according to the form of the object in regard to which the verb predicates. This feature occurs particularly in verbs of existence and of motion, so that existence or motion of round, long, flat, etc., objects, are differentiated. This feature is prominent, among others, in Athapascan, Tlingit, Kwakiutl, and Sioux.

While I am not inclined to state categorically that the areas of distribution of phonetic phenomena, of morphological characteristics, and of groups based on similarities in vocabularies are absolutely distinct, I believe this question must be answered empirically before we can undertake to solve the general problem of the history of modern American languages. If it should prove true, as I believe it will, that all these different areas do not coincide, then the conclusion seems inevitable that the different languages must have exerted a far-reaching influence upon one another. If this point of view is correct, then we have to ask ourselves in how far the phenomena of acculturation extend also over the domain of languages.

Considering the conditions of life in primitive society, it is

intelligible how the phonetics of one language may influence those of another one. Many of the American tribes are very small and intertribal marriages are, comparatively speaking, frequent, either owing to peaceful intercourse, or to the abduction and enslavement of women after warlike raids. There must always have been a considerable number of alien women in each tribe who acquired the foreign language late in life and who, therefore, transmitted the foreign pronunciation to their children. It is true that we cannot give definite observations which prove the occurrence of this phenomenon, but it can hardly be doubted that these processes were operative in all those cases where the number of alien women was considerable in proportion to the number of native women. The objective study of languages also shows that phonetic influences do spread from one people to another. The most characteristic example probably is that of the southern Bantu who have adopted the clicks of the Bushmen and Hottentots, notwithstanding the hostility that prevails between these groups.

It is not so easy to understand the development of similar categories of words in neighboring languages. It is undoubtedly true that forms of social and political organization, as well as religious life, have become alike among neighboring tribes owing to a process of acculturation. The similarity in forms of life creates the necessity of developing terms expressing these forms, and will thus bring about indirectly similarity in those ideas that are expressed by words. When we apply this assumption to such concepts as terms of relationship, in which we remain in doubt as to whether the term creates the feeling accompanying the sub-summation of an individual under a category, or whether the feeling creates the term, it seems difficult to understand the psychological process that led to the similarity of classification, although the facts of distribution make it perfectly clear that the similarities are due to diffusion. This difficulty is still greater when we deal with the fundamental concepts contained in the ancient stems that underly the modern words. How, for instance, should the habit of mind to classify all motion according to form spread from one language to another?

Equally difficult to understand is the spread of morphological traits from one language to another. Nevertheless, I am very much inclined to believe that such transfers do occur, and I even consider it possible that they may modify fundamental structural characteristics. An example of this kind is the intrusion of nominal cases into the upper Chinook dialects, presumably due to Sahaptin influence. I believe that the peculiar development of the second third person in Kutenai, which is so characteristic of Algonquin, is also due to a contact phenomenon, because we find hardly anywhere else a similar development of this tendency. Still another case of peculiar parallelism is found among the Eskimo and Chukchi. Notwithstanding the fundamental differences between the two languages, the modern development of the verb with its numerous semi-participial forms, shows a peculiar parallelism. The traits in question are entirely absent in neighboring languages, and for this reason it is difficult to abstain from the conclusion that these similarities must be due to historical reasons.

The distribution of these phenomena the world over is so irregular, that it would be entirely unwarranted to claim, that all similarities of phonetics, classification of concepts, or of morphology, must be due to borrowing. On the contrary, their distribution shows that they must be considered as due to psychological causes such as the unavoidable necessity of classification of experience in speech, which can lead to a limited number of categories only, or the physiological possibilities of articulation, that also limit the range of possible sounds which are sufficiently distinct to the ear for clear understanding.

To give a few examples: it would hardly be possible to claim that the numerous instrumental prefixes of the Haida and those of Shoshoni, Kutenai, and Sioux, are historically related. It is true that Shoshoni, Kutenai, and Sioux form a continuous group to which might be added many of the Californian languages. Considering the continuity of this area and the absence of analogous forms outside, I am strongly inclined to believe that some historical reason must have led to their peculiar development, but it would be difficult to connect historically the Haida with this district.

In the same way, it would be rash to associate the strong development of glottalized sounds in Chili with the analogous sounds on the Northwest Coast of America; the distinction between neutral and active verbs among the Maya, Sioux, and Tlingit; or the occurrence of three genders in Indo-European and in Chinook.

Our experience in Indo-European and Semitic languages shows clearly that extended borrowing of words may occur and that borrowed words may undergo such changes that their origin can be understood only by historical study. That similar phenomena have occurred in American languages is indicated by the distribution of such words as names of animals and of plants which are in some cases borrowed. Other classes of nominal concepts are not so subject to borrowing on account of the extensive use in many American languages of descriptive terms. Nevertheless, in mixed settlements considerable numbers of borrowed words may be found. An example of this kind is presented by the Comox of Vancouver island who speak a Salish language with a strong admixture of Kwakiutl words, or by the Bellacoola, another Salish people, who have borrowed many Kwakiutl and Athapascan terms. There is no particular difficulty in understanding the process which leads to the borrowing of words. Intertribal contact must act in this respect in a similar way as international contact does in modern times.

If these observations regarding the influence of acculturation upon language should be correct, then the whole history of American languages must not be treated on the assumption that all languages which show similarities must be considered as branches of the same linguistic family. We should rather find a phenomenon which is parallel to the features characteristic of other ethnological phenomena—namely, a development from diverse sources which are gradually worked into a single cultural unit. We should have to reckon with the tendency of languages to absorb so many foreign traits, that we can no longer speak of a single origin, and that it would be arbitrary whether we associate a language with one or the other of the contributing stocks. In other words, the whole theory of an “*Ursprache*” for every group of modern languages,

must be held in abeyance until we can prove that these languages go back to a single stock and that they have not originated, to a large extent, by the process of acculturation.

From this point of view I should not be inclined to claim, for instance, that Tlingit and Athapascan are members of the same linguistic family. There is not the slightest doubt that the morphology of the two groups shows the most far-reaching similarities. Since, furthermore, the two languages are contiguous, the inference is inevitable that these similarities must be due to historical causes. It is, however, another question whether we are to infer immediately that these differences are due to the fact that in very early times the two groups had a common "Ursprache." The vocabularies of Tlingit and Athapascan are fundamentally distinct, and it does not seem to me that Dr. Sapir has proved his case of relationship between the two languages by the comparison of a limited number of words that show slight phonetic similarities. The question would remain to be answered, why there should be such fundamental dissimilarities between by far the larger number of words, and the question should still be asked how these dissimilarities are to be explained.

It is true enough that in a comparison of modern Indo-European languages, without any knowledge of their previous history, it might be very difficult to prove relationship—let us say, between Armenian and English—and we might be compelled to adopt a similar conclusion as the one suggested here. Partially this inference would be correct, because our modern Indo-European languages contain much material that is not Indo-European by origin. The fundamental question is whether this material may become so extensive and influence the morphology so deeply that the inclusion of a language in one group or another might become arbitrary. I think it is well worth considering whether the similarities between Finnish and Indo-European, to which Sweet has called attention, may not be due to such a process of acculturation.

To sum up, it seems to my mind that a critical attitude towards our problem makes it necessary to approach our task from three points of view. Firstly, we must study the differentiation of dialects

like those of the Sioux, Muskoki, Algonquin, Shoshoni, Salish, and Athapascan. Secondly, we must make a detailed study of the distribution of phonetic, grammatical, and lexicographical phenomena, the latter including also particularly the principles on which the grouping of concepts is based. Finally, our study ought to be directed not only to an investigation of the similarities of languages, but equally intensively towards their dissimilarities. Only on this basis can we hope to solve the general historical problem.

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